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ABSTRACT

Functioning level of 25 counselor trainees was assessed by clients responding to the Barrett-Lennard Relationship Inventory, by judges using Carkhuff rating scales, and by counselor responses to a criterion instrument, Human Empathic Listening Test. The subparts and total scores were correlated to examine the relationship among the three measuring instruments. Carkhuff rating scales were found to correlate with the criterion instrument, but the Relationship Inventory did not. Ancillary findings indicated that the subparts of the Relationship Inventory and Carkhuff rating scales did not measure separate dimensions of counselor functioning as claimed. A factor analysis of the three total test scores indicated that an evaluation factor and a subjective perception factor were being measured by the three instruments. Implications of the study suggest that when consumer opinions although use of both the Inventory and the Carkhuff rating scales may yield although use of both the Inventory and the Carkhuff rating scales may yield contradictory results. When a singular evaluation must be made, use of a criterion instrument appears to offer the most objective approach.
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A Methodological Investigation of Three Instruments That Measure Counselor Functioning

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The purpose of this research was to examine the relationship among three instruments, each measuring the counseling process from a different perspective. In the first approach the client's perceptions of the counselor were recorded on the Barrett-Lennard Relationship Inventory developed by G. T. Barrett-Lennard (1962) and later revised (Barrett-Lennard 1964). The second approach involved the rating of the counselors in counseling sessions by trained judges using Carkhuff scales (1969). The third approach measured functioning level through the counselor's responses to a criterion instrument, Human Empathic Listening Test, which presented the counselors with several simulated work samples (Gray, Nida, & Coonfield 1976). Each of these instruments measured counselor functioning differently, but all stemmed from the client-centered approach to counseling (Rogers 1957) in which the "necessary and sufficient" conditions for positive personality change were discussed. The conditions as conceived by Rogers were the presence of empathy, unconditional positive regard, and congruence.

The relationship between the client's perceptions and those of trained judges has been examined previously. McWhirter (1973) compared the scores of counselor trainees (N=45) who were rated by coached clients on the Relationship Inventory and by trained judges using the Truax and Carkhuff (1967) rating scales which were precursors to the Carkhuff (1969) scales. McWhirter noted that while the two instruments purport to measure the same characteristics which are akin to the conditions proposed by Rogers, they differ procedurally. The Relationship Inventory utilizes the perceptions of the client whereas the Truax and Carkhuff scales rely upon the perceptions of trained judges. This procedural difference in assessing counselor functioning partially explained McWhirter's findings of no significant relationship between the two instruments either in total scores or subparts. Hansen, Moore, and Carkhuff (1968), using the Relationship Inventory and Truax and Carkhuff scales as instruments, found similar results (N=70). Burstein and Carkhuff (1968) had trained judges rate 24 subjects on the scales reported in Carkhuff and Berenson (1967) which were also precursory to the Carkhuff (1969) scales. The client also rated the counselor and the counselor rated himself on the same scales. No significant relationships were found between the ratings of the judges and the client's perceptions or between the ratings of the judges and the counselor's self perceptions.

Carkhuff and Berenson (1967) contended that the judges ratings may be more accurate than client reports even though an acknowledged high degree of subjectivity is involved in judges ratings. In order to more fully examine Carkhuff and Berenson's contention, a criterion instrument which was used as a standard for comparison was introduced into the design of the present study. The subparts and total scores of each instrument were examined to determine the relationship among the three measurement instruments.

Method

Materials

The Relationship Inventory (RI) has proven to be a popular instrument to measure the client's viewpoint of the counseling relationship. More than 100 studies of various two person relationships have been reported (Barrett-Lennard 1972). The Relationship Inventory (form OS 64) consists of 64 items, 16 items for each of four dimensions, to which the client responds using a six-point scale ranging from strong disagreement (-3) to strong agreement (+3). The range of possible scores is therefore -192 to +192 which would place an "average" score at zero. The instrument was developed to measure four dimensions of the helping relationship: empathic understanding, level of regard, congruence, and unconditionality of regard.

Barrett-Lennard (1962) in his early research concluded that the dimensions were relatively independent of each other based upon mean intercorrelations of .45 for the four subscales. Lee (cited in Tosi, Frumkin, & Wilson 1968) using client responses found intercorrelations ranging from .41 to .70 (N=46) for the revised scales. Tosi, et al. (1968), reported intercorrelations of .31 to .58 (N=69) for the revised scales and concluded that the scales could be treated separately for experimental purposes until further investigations proved otherwise. However, Mills and Zytowski (1967) disputed the claim of separate dimensions and concluded that a general factor, which accounted for two-thirds of the variance in a principal components analysis, was being measured. Further evidence for this viewpoint was provided by Lanning and Lemons (1974) after factor analyzing the Relationship Inventory. One factor consisting mostly of items from the empathic

understanding, level of regard, and congruence subscales accounted for between 62 and 72 percent of the variance for the three different samples used. A second factor which loaded heavily with items from the unconditionality of regard subscale accounted for between 16 and 21 percent of the total variance for the three samples. The results of the Mills and Zytowski (1967) and the Lanning and Lemons (1974) studies indicate that the subscales of the Relationship Inventory should be interpreted with care, placing more emphasis on the total test score as a measure of satisfaction or dissatisfaction that the client perceives in the relationship.

The Carkhuff (1969) rating scales were designed to measure four separate dimensions of the helping relationship: empathic understanding, respect, genuineness, and concreteness. These are roughly equivalent with the four dimensions measured by the Relationship Inventory since both tests were developed out of the Rogerian model (Rogers 1957). The counselor is rated on each of these dimensions by a trained judge whose ratings are correlated with one or more other judge to obtain interrater reliability. The ratings are made on a continuum of 1.0 to 5.0 with level 3.0 being the minimally facilitative level of interpersonal functioning. Responses less than 3.0 either do not attend to or detract from the relationship while responses above 3.0 are supportive in nature. Whether or not the scales actually measure separate dimensions has been questioned. Resnikoff (1972) in a critique of the scales concluded that probably one variable explains the facilitative dimensions. Resnikoff's conclusion was based on an earlier study by Muehlberg, Prince, and Drasgow (1969) in which the four scales were factor-analyzed in addition to a scale for self disclosure. Using the centroid method of factoring they found one factor accounted for up to 89 percent of the total variance. They concluded, "consequently, a single major factor accounted for practically all of the observed correlations among the facilitative conditions" (p. 95). Their findings suggest that, like the subparts of the Relationship Inventory, the subparts of the Carkhuff rating scales must be interpreted with caution, if at all.

The Human Empathic Listening Test (HELT) consists of 12 tape recorded simulated situations and 60 response items which measure counselor functioning along three

dimensions: understanding, interest, and response-ability. Understanding refers to the ability to completely comprehend the meaning that another person is trying to convey which involves both the cognitive and affective components of a message. The understanding dimension is measured by 32 multiple-choice items. The interest dimension consisting of 12 Likert type items measures the counselor's interest in helping the client. Response-ability, which is the ability to respond in a facilitative manner, is measured by 16 multiple-choice items. Several validation techniques (e.g., expert judgments, known group comparisons, correlation with other instruments, and factor analysis) were employed in test development to assure the psychometric integrity of the HELT (Coonfield, Nida, & Gray 1976; Gray, et al. 1976). No published information is yet available on the relative independence of the three subparts of the HELT. Although the HELT was originally designed as a selection instrument for telephone crisis counselors (Gray, et al., 1976), it has also been successfully applied to other help oriented situations (Coonfield, et al. 1976).

Subjects

The subjects consisted of 25 graduate students in a counseling theories and techniques course at Ohio University. These subjects served as both counselors and clients in a counseling relationship.

Procedures

The subjects were asked to engage in an actual 30 minute counseling session with another student in the class being careful not to assume complementary roles, i.e., one subject should not serve as both counselor and client with the same student. The client in each of these sessions responded to the four subscales of the Relationship Inventory. Reliability estimates, obtained by computing *coefficient alpha*, were .90 for empathic understanding, .94 for level of regard, .92 for congruence, and .85 for unconditionality of regard.

The sessions were audio tape recorded and rated on the four Carkhuff scales by two trained independent judges. The tapes were divided into three equal time segments: beginning, middle, and end. A three minute sample was chosen at random from each of

these segments and rated by the judges. The three judgments were averaged to ascertain a balanced view of the total counselor-client interaction. Pearson product-moment correlation coefficients computed as a reliability estimate between the two judges for the four subscales were .79 for empathic understanding, .51 for respect, .76 for genuineness, and .76 for concreteness.

Each of the students assumed the role of counselor when they responded to the situations presented by the HELT. KR-20 estimates for reliability for the two multiple-choice subparts were .65 and .66 for understanding and response-ability, respectively. *Coefficient alpha* was computed for the 12 Likert type items of the interest subpart with a resultant value of .81.

In order to determine the relationship between the three instruments, Pearson *r* correlation coefficients were computed between: (a) the total test score of each instrument and the total test scores of the other instruments, (b) the subscales of each test and the subscales of the same test (e.g., on the Carkhuff scales respect and genuineness, respect and concreteness, etc.), (c) the subscales of each test to its total score (e.g., empathic understanding (RI) to RI total, respect (Carkhuff) to Carkhuff total, response-ability (HELT) to HELT total, etc.), (d) the subscales of each test to the subscales of other tests (e.g., response-ability (HELT) to congruence (RI), response-ability (HELT) to concreteness (Carkhuff), etc.).

To more fully examine the relationship among the three total test scores, intercorrelations were factor analyzed with the squared multiple correlations on the diagnal. An orthogonal varimax rotation was performed using the eigenvalues greater than unity. Thus, the number of actual dimensions measured by the three instruments was determined mathematically based upon the responses of the subjects.

Results and Discussion

The means and standard deviations for each of the 14 variables are reported in Table 1. The mean scores indicated that as a group the counselors were functioning in the average to above average range on each of the three instruments.

Table 1

Means and Standard Deviations of the Barrett-Lennard Relationship Inventory, Carkhuff Rating Scales and the Human Empathic Listening Test

Scale		M	SD
Relationship Inventory			
Empathic understanding	REU	13.44	14.23
Level of regard	RLR	25.16	13.75
Congruence	RC	15.96	14.87
Unconditionality of regard	RUR	11.92	12.93
Total	RT	66.48	47.23
Carkhuff Rating Scales			
Empathic understanding	CEU	3.00	.65
Respect	CR	3.02	.46
Genuineness	CG	2.99	.61
Concreteness	CC	2.92	.63
Total	CT	11.95	2.24
Human Empathic Listening Test			
Understanding	HU	16.56	4.15
Interest	HI	9.84	1.11
Response-ability	HR-A	9.12	2.73
Total	HT	35.52	6.81

The Pearson product-moment correlation coefficients computed between the variables are reported in Table 2.

Table 2

Pearson Product-Moment Correlations Between the Barrett-Lennard Relationship Inventory, Carkhuff Rating Scales, and the Human Empathic Listening Test

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. REU	-	.75††	.85††	.48†	.92††	.27	.28	.38*	.36*	.33	-.12	-.27	.14	-.06
2. RLR		-	.85††	.42*	.90††	.29	.26	.40*	.30	.33	-.23	-.27	-.11	-.14
3. RC			-	.30	.90††	.18	.23	.37*	.33	.07	-.32	-.30	.08	-.21
4. RUR				-	.63††	.28	.30	.32	.36*	.33	.22	.08	.40*	.31
5. RT					-	.29	.31	.43*	.33	.33	-.14	-.23	.21	-.04
6. CEU						-	.92††	.90††	.81††	.96††	.29	.31	.53†	.43*
7. CR							-	.90††	.84††	.95††	.23	.27	.56†	.41*
8. CG								-	.87††	.97††	.25	.28	.51†	.40*
9. CC									-	.93††	.30	.40*	.54†	.46†
10. CT										-	.28	.33	.56†	.46†
11. HU											-	.49†	.62††	.94†
12. HI												-	.34*	.60††
13. HR-A													-	.83††
14. HT														-

Note: $N = 25$.

*$p < .05$.

†$p < .01$.

††$p < .001$.

Table 2 revealed some interesting relationships among the variables. Of the six unique coefficients that could be computed for the four subparts of the Relationship Inventory, five were significant ($p < .05$) with four of them significant at $p < .01$. The unconditionality of regard subpart did not correlate significantly with congruence. All of the subparts of the Relationship Inventory correlated highly with the total score of the Relationship Inventory. These findings support the notion suggested by Mills and Zytowski (1967) and Lanning and Lemons (1974) that the Relationship Inventory is unidimensional. Since the subscales did not discriminate adequately, further explanation of subpart scores appeared risky; therefore, only total test scores of the Relationship Inventory were used for further analysis.

All four subscales of the Carkhuff rating scales produced intercorrelations of .81 or higher ($p < .001$). The subparts correlated with the total Carkhuff score at .93 or higher ($p < .001$). These positive and substantial intercorrelations limited the interpretation of Carkhuff rating scales to the total test scores, a procedure which satisfied the concerns of unidimensionality raised by Resnikoff (1972) and Muehlberg, et al. (1969).

The intercorrelations of the subparts of the HELT revealed that response-ability and understanding yielded the most significant relationship ($p < .001$). The correlation between interest and understanding and interest and response-ability were also significant. All of the subparts of the HELT correlated positively with the HELT total score ($p < .001$). These substantial intercorrelations suggest that like Carkhuff Rating Scales and the Relationship Inventory, interpretation of subpart scores is of limited value. For further analyses only the total test scores for each of the instruments were used.

The Pearson *r* correlation coefficients computed between the Relationship Inventory and Carkhuff rating scales total scores were not significant. These results supported earlier findings (McWhirter 1973; Hansen, et al. 1968; Burstein & Carkhuff 1968) that client perceptions and judges ratings of counselor effectiveness are not related. The findings that total scores of judges ratings corresponded with total scores of the HELT ($p < .01$), whereas the total score of the Relationship Inventory did not, warranted further investigation into the factor structure of the three instruments.

The results of the factor analysis of the three total test scores contributed the necessary explanation of the relationship among the three instruments used.

Table 3

Rotated Factor Loadings

	Loadings	
	Factor I	Factor II
Relationship Inventory	.00	.68
Carkhuff Rating Scales	.65	.56
HELT	.73	- .04
Percentage of total variance	52.5	34.7

A two factor solution emerged accounting for 87.2 percent of the total variance. The HELT loaded heavily on the first factor with Carkhuff rating scales almost as high. The second factor was comprised largely of the Relationship Inventory with Carkhuff rating scales again loading highly.

A look at the nature of the counselor-client relationship perhaps helps explain these results. This relationship is one that has a quality intrinsic to it that is perceived by both the counselor and the client though these perceptions are not always synonymous (Burstein & Carkhuff 1968). The client reflects his perceptions of this intrinsic quality when evaluating the functioning of the counselor on the Relationship Inventory. A judge in rating the counselor's functioning level is aware of this intrinsic quality through the responses of both the client and the counselor but can never fully capture it since he is external to the relationship. A judge rates the counselor by use of some criteria, albeit subjective, being influenced by his perceptions of the client's responses. These perceptions consequently affect his ratings. The criterion instrument avoids the subjective perceptions of the client since it deals only with counselor responses to standard, invariant client situations. It is not surprising, then, that Carkhuff rating scales had high loadings of both

factors since the judges listened to both the counselor and the client while the HELT used only counselor responses and the Relationship Inventory only client responses. The first factor can possibly be interpreted as an evaluation factor comprised of the criterion instrument and the judge's criteria of counselor functioning. The second factor might be thought of as a subjective perception factor made up of the client's perceptions and the judge's reactions to the client's responses.

Conclusions

The results of this study indicate that only the total scores of any of the three instruments should be interpreted since the subparts do not adequately discriminate the behaviors that they were designed to measure. When the total test scores are examined, the results indicate that the instruments measure the counselor from different perspectives. The question arises as to which instrument is best to use, but this question can only be answered in terms of the purposes of the measurement.

When consumer opinions are of importance, the Relationship Inventory appears to be the most logical choice; however, Carkhuff rating scales apparently capture much of the same information and add some measure of objectivity. Used in conjunction though these instruments may yield contradictory results.

In most counselor education settings trained judges in the person of instructors or supervisors are constantly making judgments concerning the functioning of counseling students based upon their observations. The use of rating scales is well adapted for this kind of evaluation, but the introduction of a criterion instrument could supply further objective information especially in instances where subjectivity in the rating process is suspected. Since Carkhuff rating scales and the HELT are closely related, individuals whose scores on the two instruments were widely divergent would be important ones to evaluate more carefully.

Should circumstances, i.e., time constraints, lack of trained judges, or lack of clients, require that a singular evaluation be made, use of a criterion instrument appears to offer the most objective approach to use.

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